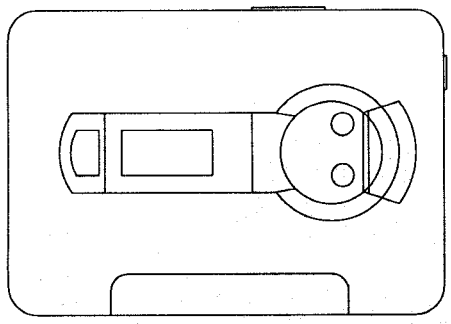
aiwa

aiwa SERVICE

HS-RX797

SERVICE MANUAL



STEREO RADIO CASSETTE PLAYER

• BASIC TAPE MECHANISM: 6ZM-2 P8 • TYPE: AH,AU,AZF

SPECIFICATIONS

Frequency range:
Reception area "USA" AM: 530 – 1,710 kHz (10 kHz steps)
FM1, FM2: 87.5 – 108.1 MHz (200 kHz steps)
Reception area "JPN"<AU, AH> AM: 531 – 1,629 kHz (9 kHz steps)
FM1, FM2: 76 – 108 MHz (100 kHz steps in 76 – 90 MHz, 50 kHz step in 90 – 108 MHz)
Reception area "EU" AM: 531 – 1,602 kHz (9 kHz steps)
FM1, FM2: 87.5 – 108 MHz (50 kHz steps)
Maximum output: 2 mW + 2 mW<AZF>
4 mW + 4 mW<AH, AU>
(EIAJ 32 ohms)
Power source: DC 1.2V using supplied rechargeable battery NB-3A
DC 1.5V using a R6 (size AA) dry cell battery
AC house current using the optional AC adaptor

Maximum dimensions (W x H x D): 110.9 x 79.7 x 29.8 mm ($4^{3}/_{8}$ x $3^{1}/_{4}$ x $1^{3}/_{16}$ in)
Weight: Approx. 140 g (4.9 oz) excluding batteries

<Supplied headphones HP-MR002A><AZF>
Type: In-ear type
Impedance: 32 ohms
Sensitivity: 105 dB/mW

<Recommended commercially available headphones><AZF>
Type: In-ear type/Headband type
Impedance: 16 – 32 ohms
Sensitivity: 100 – 109 dB/mW

<Battery charger RB-N01>
Rated voltage: AC 115 V – 230 V, 50/60 Hz<AH>
AC 120 V, 60 Hz<AU>
AC 230 V, 50 HZ<AZF>

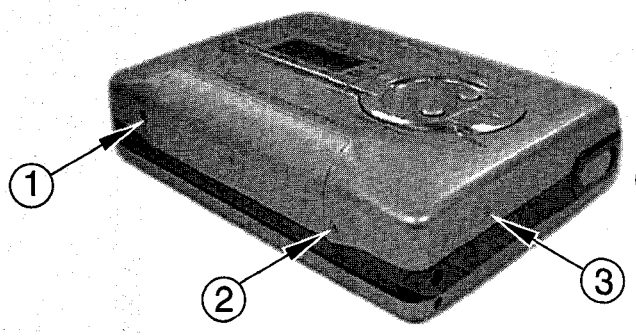
• Design and specifications are subject to change without notice.

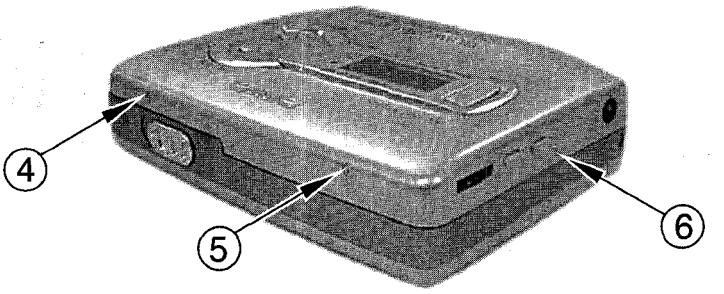
• Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

S/M Code No. 09-989-289-1FE

DISASSEMBLY INSTRUCTION

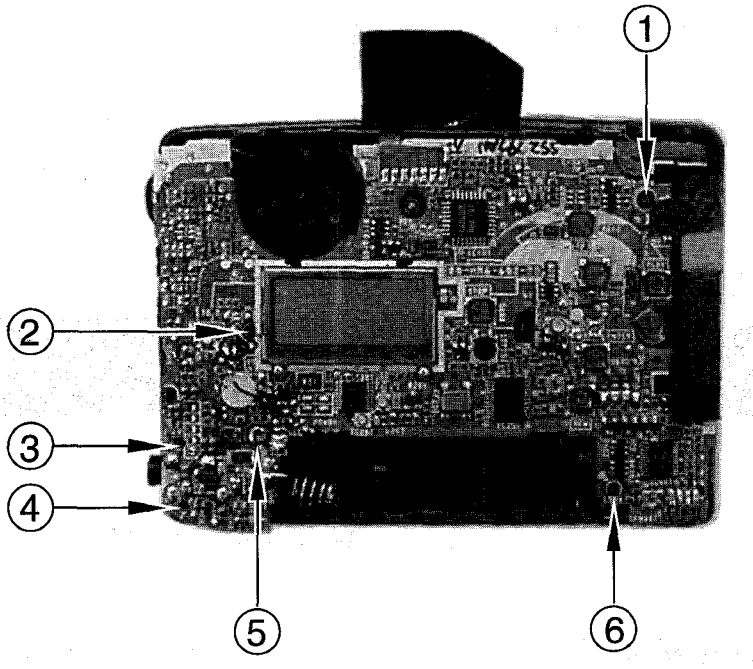
1) Remove the 6 screws.





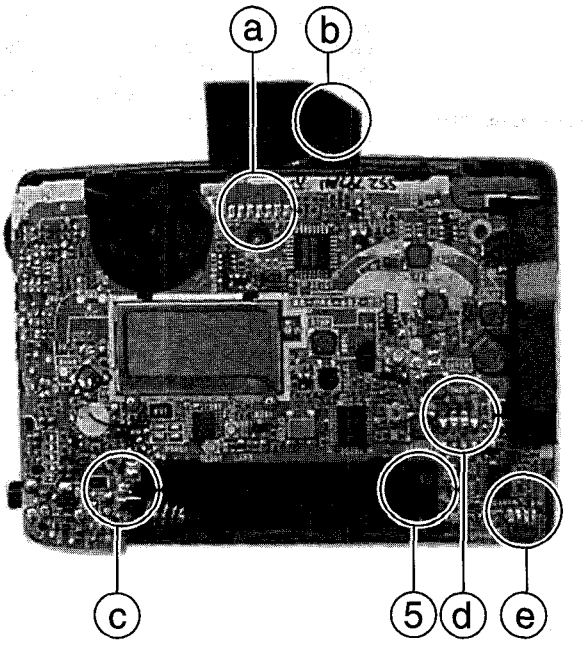
2) Remove the cabinet.

3) Remove the 6 screws.



4) Remove the SHIELD.
   a) HEAD FLEX
   b) HEAD
   c) BATT ⊕LAND
   d) MOTOR LAND
   e) FLEX 4P

5) Remove the battery ⊖terminal
   from the holder and pull up the MAIN C.B.



ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-441-010		C-IC,BA3632K
	87-A20-818-040		C-IC,NJM2185AV
	87-A20-745-040		C-IC,TA2030FN
	87-A20-076-040		C-IC,TA2022AFN
	87-A20-124-080		IC, TK11823
	87-A20-961-040		C-IC,MM1279XV
	87-A20-603-140		C-IC,RN5RK241A
	87-A20-880-010		C-IC,TC9327F-017
	87-A20-850-040		C-IC,AK93C45AV
	87-A20-757-040		C-IC,S-80815ANNP-EDC-T2
	87-A21-050-040		C-IC,S-80810ANNP-E70
TRANSISTOR			
	87-026-461-080		C-TR IMH3
	89-113-625-080		TR,2SA1362GR(120MHZ,0.
	87-026-352-080		CHIP-TR,DTC144TU
	87-026-585-080		C-TR,IMX1 HQQ
	87-026-482-080		TR,RN4610
	87-026-425-080		C-TR,RN2307
	89-342-153-080		TR,2SC4215
	87-026-343-080		C-TR,DTC123JU
	89-508-814-080		C-FET 2SK881 Y
	89-508-804-080		CHIP FET 2SK880Y
	89-341-165-080		CHIP TRANSISTOR 2SC4116GR
	87-026-480-080		TR,RN4605 (0.3W)
	89-342-132-080		TR,2SC4213
	87-026-481-080		TR,RN4607 (0.3W)
	87-026-648-080		C-TR,UPA608T
	89-341-164-080		CHIP-TRANSISTOR,2SC4116 Y<AZF>
	87-026-470-080		TR,HN1C03F (0.3W)<AZF>
	89-115-864-080		CHIP TRANSISTOR 2SA1586Y<AZF>
DIODE			
	87-017-366-080		DIODE,DAN 202U
	87-001-553-080		C-DIODE 1SS322
	87-001-167-080		DIODE,1SS302 (100MA)<AZF>
MAIN C.B			
	87-A90-291-080		C-FLTR,KMFC5132AE-TC
BPF201	81-HW1-628-080		CHIP BAND PASE FILTER
C101	87-012-272-080		CHIP CAP,U 680P-50B
C102	87-012-272-080		CHIP CAP,U 680P-50B
C103	87-012-272-080		CHIP CAP,U 680P-50B
C104	87-012-272-080		CHIP CAP,U 680P-50B
C105	87-016-117-080		C-CAP,U 0.018-25 J B
C106	87-016-117-080		C-CAP,U 0.018-25 J B
C107	87-016-296-080		C-CAP,TN 22-4SV(A)
C108	87-016-296-080		C-CAP,TN 22-4SV(A)
C109	87-010-828-080		CHIP CAPACITOR,U 0.033-25F
C110	87-010-828-080		CHIP CAPACITOR,U 0.033-25F
C111	87-A10-249-080		C-CAP,U 1-10 ZF
C112	87-A10-249-080		C-CAP,U 1-10 ZF
C113	87-A10-249-080		C-CAP,U 1-10 ZF
C114	87-A10-249-080		C-CAP,U 1-10 ZF
C115	87-012-272-080		C-CAP,U 680P-50 B
C116	87-012-272-080		C-CAP,U 680P-50 B
C117	87-A10-249-080		C-CAP,U 1-10 ZF
C118	87-A10-249-080		C-CAP,U 1-10 ZF
C119	87-A10-263-080		C-CAP,U 0.1-16ZF
C120	87-A10-263-080		C-CAP,U 0.1-16ZF
C121	87-010-673-080		CAP, ELECT 100-2
C122	87-010-673-080		CAP, ELECT 100-2
C123	87-A10-703-080		C-CAP,TN 47-2.5 M A
C124	87-A10-263-080		C-CAP,U 0.1-16ZF
C125	87-016-296-080		C-CAP,TN 22-4SV(A)
C126	87-010-829-080		CAP, U 0.047-16
C127	87-A10-781-080		C-CAP,U 0.15-10 K B
C128	87-016-504-080		C-CAP,TN 6.8-4(A2)
C129	87-A10-260-080		C-CAP,U 0.1-16 K B
C130	87-016-296-080		C-CAP,TN 22-4SV(A)
C132	87-016-286-080		C-CAP,TN 2.2-6.3 F93
C133	87-A10-263-080		C-CAP,U 0.1-16ZF
C134	87-010-274-080		C-CAP,TN 3.3-4
C135	87-A10-703-080		C-CAP,TN 47-2.5 M A
C136	87-A10-263-080		C-CAP,U 0.1-16ZF
C137	87-012-273-080		C-CAP,U 820P-50 B
C138	87-A10-263-080		C-CAP,U 0.1-16ZF
C139	87-010-787-080		CAP, U 0.022-25
C140	87-A10-249-080		C-CAP,U 1-10 ZF
C141	87-A10-249-080		C-CAP,U 1-10 ZF
C142	87-A10-263-080		C-CAP,U 0.1-16ZF
C143	87-A10-249-080		C-CAP,U 1-10 ZF
C151	87-A10-827-080		C-CAP,U 0.47-6.3 K B
C152	87-A10-827-080		C-CAP,U 0.47-6.3 K B
C153	87-A10-353-080		C-CAP,U0.22-10KB
C154	87-A10-353-080		C-CAP,U0.22-10KB
C155	87-012-274-080		CHIP CAP,U 1000P-50B
C156	87-010-746-080		CAP, TANTAL 10-4
C201	87-A10-030-080		C-CAP,U 100P-50 CH
C202	87-012-275-080		C-CAP,U 1200P-50 B
C203	87-A10-031-080		C-CAP,U 0.01-25 KB
C204	87-012-164-080		C-CAP,U 2P-50 CH
C205	87-012-193-080		C-CAP,U 82P-50 CH
C207	87-A10-031-080		C-CAP,U 0.01-25 KB
C208	87-010-178-080		CHIP CAP 1000P
C209	87-A10-031-080		C-CAP,U 0.01-25 KB
C210	87-012-274-080		CHIP CAP,U 1000P-50B
C211	87-A10-031-080		C-CAP,U 0.01-25 KB
C213	87-012-165-080		C-CAP,U 3P-50 CH
C214	87-A10-263-080		C-CAP,U 0.1-16ZF
C215	87-A10-249-080		C-CAP,U 1-10 Z F
C251	87-012-172-080		CAPACITOR CHIP U 10P CH
C253	87-012-140-080		CAP 470P
C254	87-012-188-080		C-CAP,U 47P-50 CH
C255	87-012-245-080		C-CAP,U 15P-50 UJ
C256	87-010-787-080		CAP, U 0.022-25
C257	87-A10-031-080		C-CAP,U 0.01-25 KB
C258	87-012-273-080		C-CAP,U 820P-50 B
C260	87-A10-249-080		C-CAP,U 1-10 ZF
C261	87-010-746-080		CAP, TANTAL 10-4
C262	87-012-274-080		CHIP CAP,U 1000P-50B
C263	87-012-282-080		CAP, U 4700P-50
C264	87-012-285-080		C-CAP,U 8200P-50 B
C265	87-A10-249-080		C-CAP,U 1-10 ZF
C266	87-A10-249-080		C-CAP,U 1-10 ZF
C267	87-012-285-080		C-CAP,U 8200P-50 B
C268	87-A10-263-080		C-CAP,U 0.1-16ZF
C269	87-010-829-080		CAP, U 0.047-16
C270	87-012-270-080		CAP, U 470P-50
C271	87-012-349-080		C-CAP,S 1000P-50 CH
C272	87-A10-249-080		C-CAP,U 1-10 ZF
C273	87-A10-025-080		C-CAP,U 0.22-16Z F
C274	87-012-274-080		CHIP CAP,U 1000P-50B
C275	87-A10-263-080		C-CAP,U 0.1-16ZF
C276	87-A10-031-080		C-CAP,U 0.01-25 KB
C277	87-012-270-080		CAP, U 470P-50
C278	87-010-829-080		CAP, U 0.047-16
C281	87-A10-263-080		C-CAP,U 0.1-16ZF
C301	87-010-787-080		CAP, U 0.022-25
C302	87-010-505-080		CA, CHIP TANTALUM 1-16
C303	87-A10-263-080		CAP, U 0.1-16 ZF
C304	87-A10-703-080		C-CAP,TN 47-2.5 M A
C305	87-A10-263-080		C-CAP,U 0.1-16ZF
C306	87-012-167-080		C-CAP,U 5P-50 CH
C307	87-012-169-080		C-CAP,U 7P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C308	87-012-188-080		C-CAP,U 47P-50 CH
C401	87-A10-031-080		C-CAP,U 0.01-25 KB
C402	87-A10-260-080		C-CAP,U 0.1-16 K B
C403	87-A10-950-080		C-CAP,S 4.7-10 F Z
C404	87-A10-263-080		C-CAP,U 0.1-16ZF
C405	87-A10-025-080		C-CAP,U 0.22-16Z F
C406	87-010-829-080		C-CAP,U 0.047-16 F Z
C407	87-A10-031-080		C-CAP,U 0.01-25 KB
C408	87-A10-031-080		C-CAP,U 0.01-25 KB
C409	87-A10-031-080		C-CAP,U 0.01-25 KB
C410	87-016-296-080		C-CAP,TN 22-4SV(A)
C501	87-016-431-080		C-CAP,E 220-4 5.5N
C503	87-A10-418-080		C-CAP,TN 22-4 A TCF
C504	87-A10-418-080		C-CAP,TN 22-4 A TCF
C601	87-016-296-080		C-CAP,TN 22-4SV(A)
C602	87-A10-031-080		C-CAP,U 0.01-25 KB
C603	87-A10-263-080		C-CAP,U 0.1-16ZF
C604	87-012-172-080		CAPACITOR CHIP U 10P CH
C605	87-012-172-080		CAPACITOR CHIP U 10P CH
C606	87-A10-025-080		C-CAP,U 0.22-16Z F
C607	87-A10-263-080		C-CAP,U 0.1-16ZF
C608	87-A10-263-080		C-CAP,U 0.1-16ZF
C609	87-A10-263-080		C-CAP,U 0.1-16ZF
C610	87-A10-263-080		C-CAP,U 0.1-16ZF
C612	87-A10-263-080		C-CAP,U 0.1-16ZF
C613	87-A10-249-080		C-CAP,U 1-10 ZF
C801	87-A10-249-080		C-CAP,U 1-10 ZF<AZF>
C802	87-A10-249-080		C-CAP,U 1-10 ZF<AZF>
C803	87-016-296-080		C-CAP,TN 22-4SV(A)<AZF>
CF253	87-A90-456-080		C-FLTR,PFWCC 450J3
D201	87-A40-517-040		C-VARI-CAP,SVC208
D202	87-A40-517-040		C-VARI-CAP,SVC208
D251	87-A40-462-040		C-VARI-CAP,SVC347(S)
D701	87-A90-278-080		C-LED,SML-210VT RED
IFT251	87-005-788-080		C-IFT,AM (450K)
J101	87-A60-273-010		JACK,3.5 ST 5P
J501	87-A60-319-010		JACK,DC DIA 2.75
L101	87-A50-322-080		C-COIL,S BK2125 LM252
L102	87-A50-322-080		C-COIL,S BK2125 LM252
L103	87-A50-322-080		C-COIL,S BK2125 LM252
L104	87-A50-322-080		C-COIL,S BK2125 LM252
L109	87-A50-322-080		C-COIL,S BK2125 LM252
L110	87-HJ2-613-010		COIL,LOADING3.3UH
L111	87-003-245-080		C-COIL,22UH
L201	87-A50-245-080		C-COIL,S 0.1UH G
L202	87-A50-244-080		C-COIL,S 82NH G
L203	87-005-564-080		CHIP-COIL S2.2UH
L251	87-005-375-080		C-COIL,100MH
L252	88-HJ3-610-010		BAR-ANT,MW
L301	87-A50-037-080		C-COIL,D-D 5CDLU
L501	87-A50-171-080		C-COIL, 22UH K LQH1C220K04
L502	87-A50-171-080		C-COIL, 22UH K LQH1C220K04
L504	87-A50-171-080		C-COIL, 22UH K LQH1C220K04
L505	87-A50-171-080		C-COIL, 22UH K LQH1C220K04
LCD601	88-HR6-606-010		LCD,AIW4146
PS651	87-A90-526-010		SNSR,NJL 5163-F1-B
R103	87-022-432-080		C-RES,U 270-1/16W F
R104	87-022-432-080		C-RES,U 270-1/16W F
R105	87-022-437-080		C-RES,U 430-1/16W F
R106	87-022-437-080		C-RES,U 430-1/16W F
R153	87-022-252-080		C-RES,U36K-1/16WF
R501	87-022-569-080		C-RES,0.47-1/2 W K
R608	87-022-245-080		C-RES U 18K-1/16WF
R609	87-022-245-080		C-RES U 18K-1/16WF
R610	87-022-223-080		CHIP RES 2.2K 1/16W F
R611	87-022-223-080		CHIP RES 2.2K 1/16W F
R612	87-022-223-080		CHIP RES 2.2K 1/16W F
R613	87-022-227-080		C-RES,U 3.3K-1/16W F
R614	87-022-227-080		C-RES,U 3.3K-1/16W F
S601	87-A90-356-210		SW,LEAF 6ZM-2
S602	87-036-379-180		C-SW,SL1-1-2 SS350-A12B-C-T
S603	87-A90-378-080		C-SW,PUSH PT035C1T
S604	87-A90-378-080		C-SW,PUSH PT035C1T
S605	87-A90-665-080		C-SW,TACT LS7A2M
S606	87-A90-455-010		SW,PUSH HXW4001
S607	87-A90-665-080		C-SW,TACT LS7A2M
S608	87-A90-665-080		C-SW,TACT LS7A2M
S609	87-A90-665-080		C-SW,TACT LS7A2M
S610	87-A90-665-080		C-SW,TACT LS7A2M
S611	87-A90-665-080		C-SW,TACT LS7A2M
S612	87-A90-665-080		C-SW,TACT LS7A2M
S801	87-036-373-180		C-SW,SL1-1-2 SSSS81543A<AZF>
SFR251	87-A90-027-080		C-SFR,22K H CVR-32
SFR401	87-A90-104-080		C-SFR,6.8K H CVR-32
TC201	87-A90-688-080		C-TRIMMER,30P CTZ2S-30C
TC202	87-A90-654-080		C-TRIMMER,10P CTZ2S-10A
TC251	87-011-189-080		TRIMMER CHIP CTZ-10A
TH401	87-A90-855-080		C-THMS,SC20-3K102K
VR101	88-HJ3-609-080		C-VR,RTRY 50KCX2 XV0103G
X601	87-A70-078-110		VIB,XTAL 75KHZ KF-26R5

DD CONV C.B

C551	87-016-444-080		C-CAP,TN 47-10 F95E
C552	87-016-444-080		C-CAP,TN 47-10 F95E
C553	87-A10-034-080		C-CAP,TN 33-10(B2)
L551	87-A50-174-080		C-COIL, 82UH 7004-2
L552	87-A50-010-080		C-COIL,22UH LQH3C

DD CONV FLEX C.B

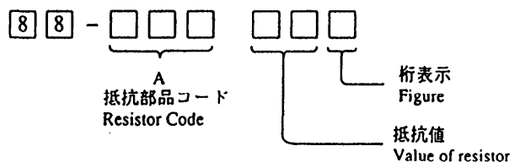
	88-HJ3-607-010		PWB,FLEX 4P

HEAD FLEX C.B

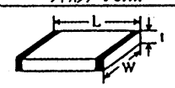
PH1	86-ZM2-323-010		HEAD ASSY,R2

○ チップ抵抗部品コード／CHIP RESISTOR PART CODE

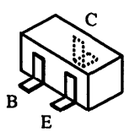
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

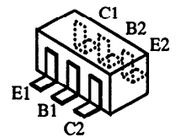
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード ：A Resistor Code: A
1／16W	1608	±5%	CJ		1.6	0.8	0.45	108
1／10W	2125	±5%	CJ		2	1.25	0.45	118
1／8W	3216	±5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



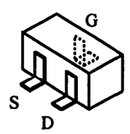
2SA1362
2SA1586
2SC4116
2SC4213

2SC4215
DTC123JU
DTC144TU
RN2307

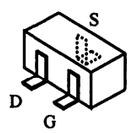


IMX1
HN1C03F
IMH3
RN4607

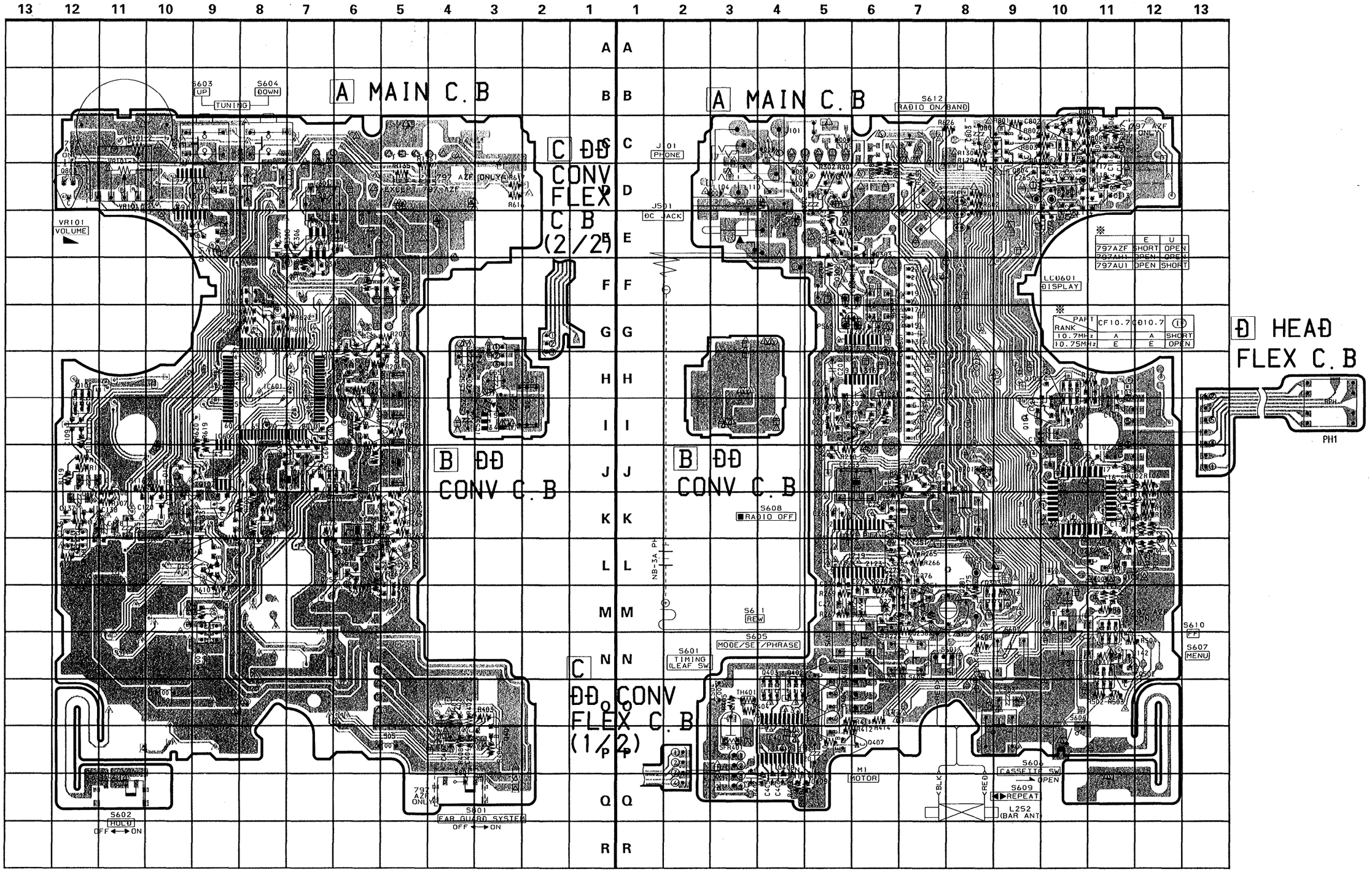
UPA608T
RN4605
RN4610



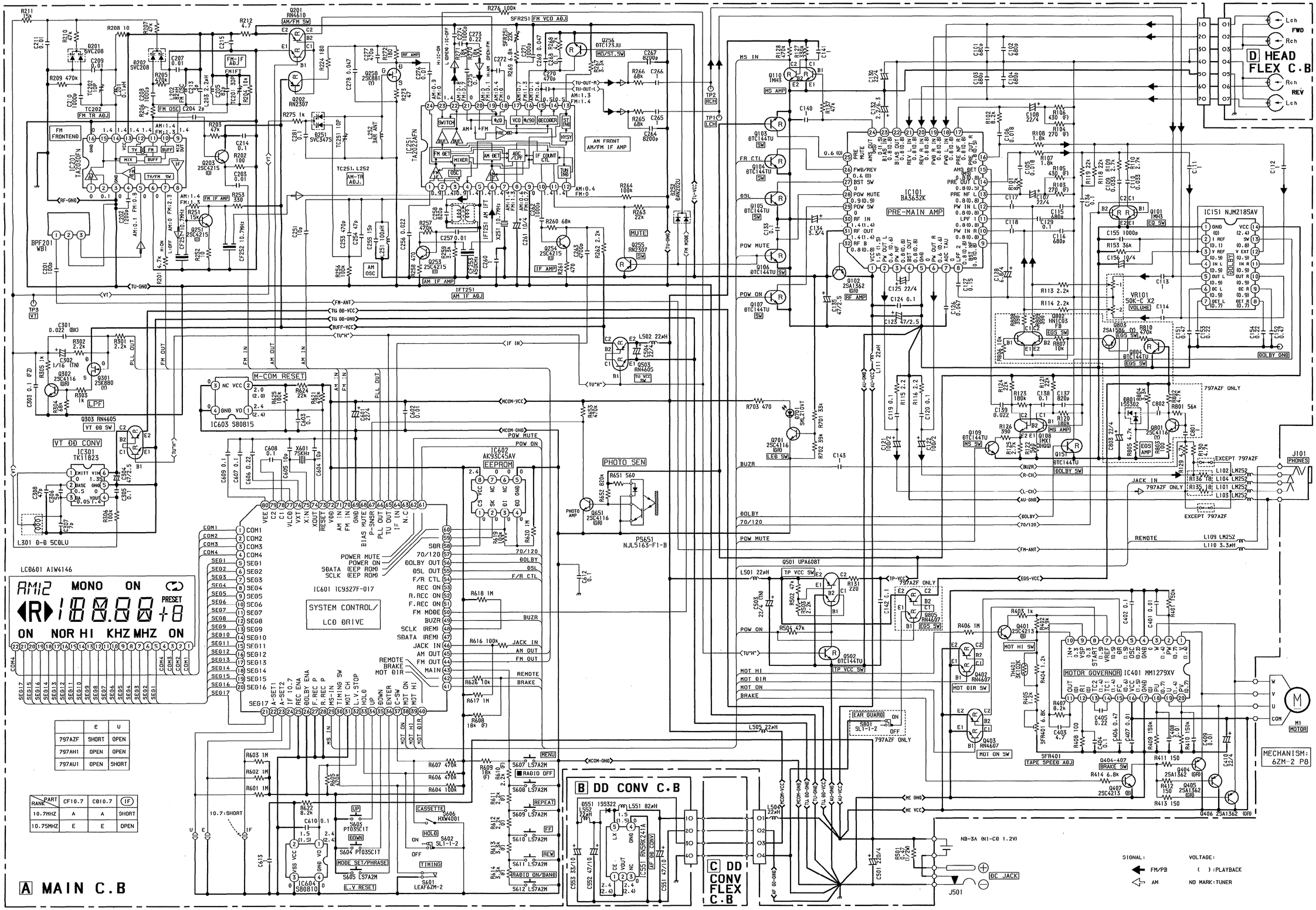
2SK880



2SK881


A MAIN C.B
A MAIN C.B
C ÐÐ CONV FLEX C B (2/2)
B ÐÐ CONV C.B
B ÐÐ CONV C.B
C ÐÐ CONV FLEX C.B (1/2)
Ð HEAÐ FLEX C.B
S603 UP
S604 DOWN
TUNING
VR101 VOLUME
J101 PHONE
J501 DC JACK
S612 RADIO ON/BAND
S608 RADIO OFF
S601 TIMING (LEAF SW)
S605 MODE/SE/PHRASE
S606 CASSETTE SW
OPEN
S607 MENU
S609 REPEAT
S610
S611 REW
S602 HOLD
OFF ON
S801 EAR GUARD SYSTEM
OFF ON
797 AZF ONLY
EXCEPT 797 AZF
M1 MOTOR
L252 (BAR ANT)
LC0601 DISPLAY
PH1
NB-3A PH
797AZF SHORT OPEN
797AU1 OPEN OPEN
797AU1 OPEN SHORT
PART CF10.7 CD10.7
RANK
10.7MHz A A SHORT
10.75MHz E E OPEN

SCHEMATIC DIAGRAM (MAIN)

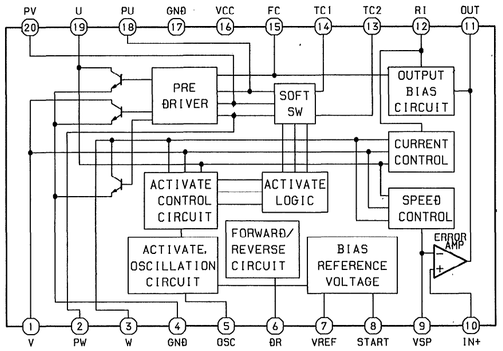


	E	U
797AZF	SHORT	OPEN
797AH1	OPEN	OPEN
797AU1	OPEN	SHORT

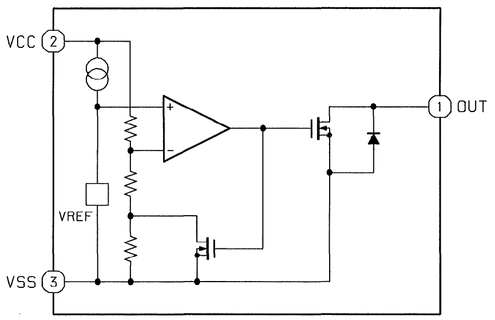
PART / RANK	CF10.7	CD10.7	IF
10.7MHZ	A	A	SHORT
10.75MHZ	E	E	OPEN

IC BLOCK DIAGRAM

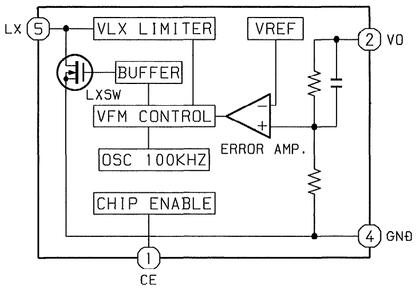
IC, MM1279XV



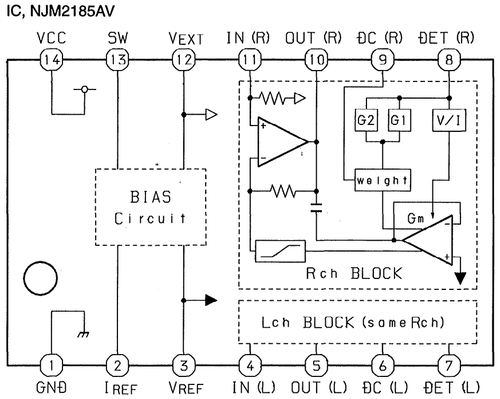
IC, S80815/80810



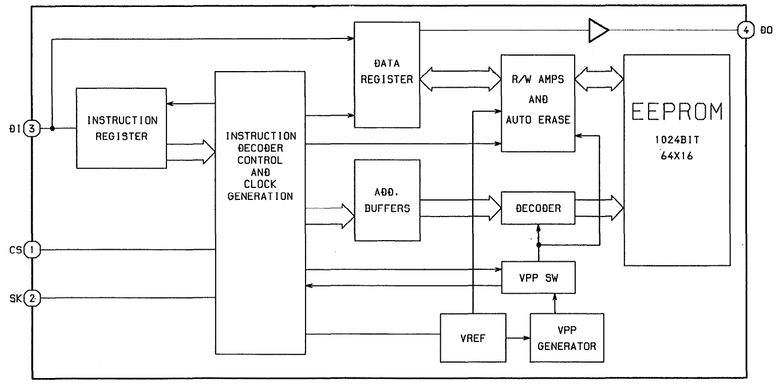
IC, RN5RK241A



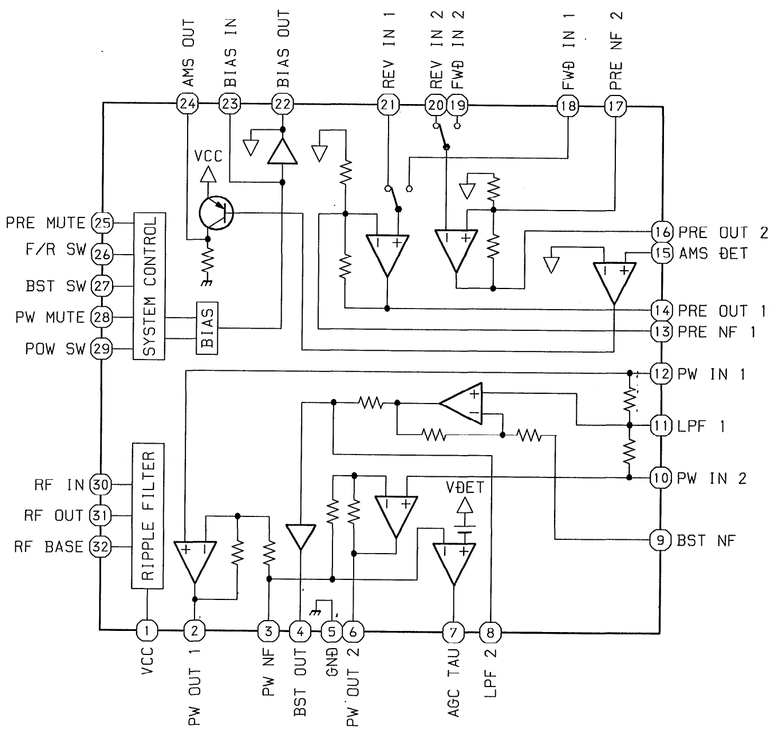
IC, NJM2185AV



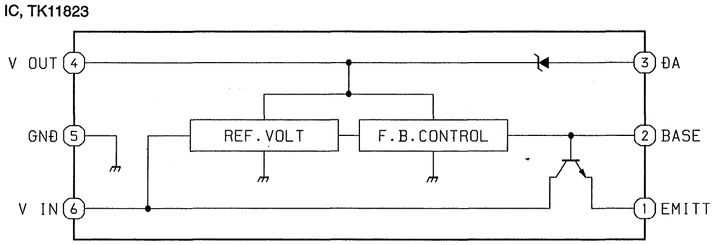
IC, AK93C45AV



IC, BA3632K

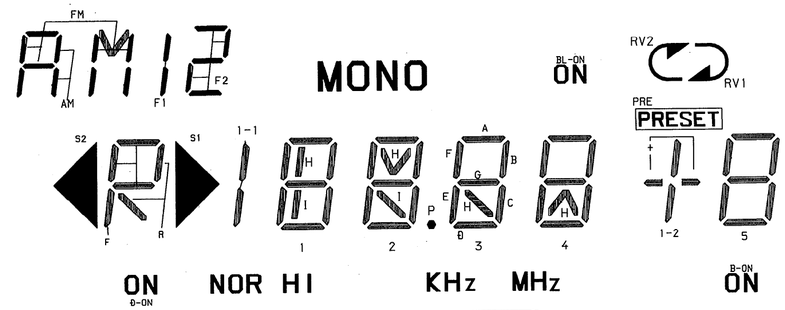


IC, TK11823



LCD DIAGRAM

LCD, AIW4146



NO.	COM1	COM2	COM3	COM4
1	COM1	——	——	——
2	——	COM2	——	——
3	——	——	COM3	——
4	——	——	——	COM4
5	5A	5B	5C	5G
6	——	4C	4B	5Ð
7	4Ð	4H	4G	4A
8	B-ON	4E	4F	5E
9	MHz	3B	1-2	5F
10	3C	3G	3A	+
11	3Ð	3H	——	——
12	KHz	3E	3F	PRE
13	P	2C	2B	HI
14	2Ð	21	2G	NOR
15	Ð-ON	2E	2F	2H
16	——	1C	1B	2A
17	1Ð	11	1G	1H
18	1-1	1E	1F	1A
19	S2	S1	FM	F1
20	F	R	AM	F2
21	MONO	BL-ON	RV2	RV1
22	——	——	——	COM4

IC DESCRIPTION

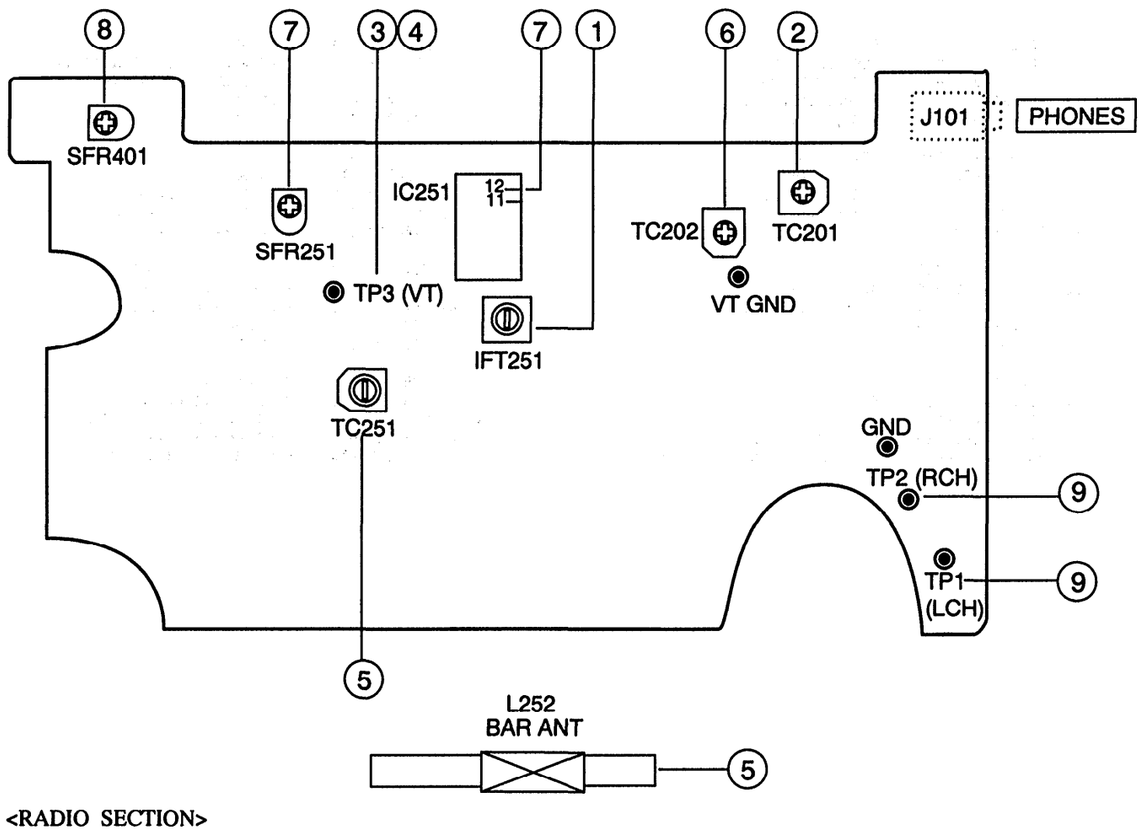
IC, TC9327F-017

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1 ~ 4</td><td>COM1~COM4</td><td>O</td><td>LCD commom output 1~4.</td></tr>
<tr><td>5 ~ 21</td><td>SEG1 ~ SEG17</td><td>O</td><td>LCD segment output 1~17.</td></tr>
<tr><td>22,23</td><td>A-SET1,2</td><td>I</td><td>Input pin for switching J , U , E , H areas.
<table>
<tr><th></th><th>J area</th><th>U area</th><th>E area</th><th>H area</th></tr>
<tr><td>A-SET1</td><td>L</td><td>L</td><td>H</td><td>H</td></tr>
<tr><td>A-SET2</td><td>L</td><td>H</td><td>L</td><td>H</td></tr>
</table></td></tr>
<tr><td>24</td><td>IF 10.7</td><td>I</td><td>"H": IF 10.75 MHz. "L": 10.7 MHz</td></tr>
<tr><td>25</td><td>REC ENA</td><td>I</td><td>Input pin for REC enable. "H": REC enable. "L": REC disable.</td></tr>
<tr><td>26</td><td>DOLBY ENA</td><td>I</td><td>Input pin for DOLBY enable. "H": DOLBY enable. "L": DOLBY disable.</td></tr>
<tr><td>27</td><td>F. REC P</td><td>I</td><td>"H": FWD REC shift disable. "L": enable.</td></tr>
<tr><td>28</td><td>R. REC P</td><td>I</td><td>"H": REV REC shift disable. "L": enable.</td></tr>
<tr><td>29</td><td>MS IN</td><td>I</td><td>Pin to input music sensor signal. "H": music exist. "L": blank.</td></tr>
<tr><td>30</td><td>TIMMIG SW</td><td>I</td><td>Pin to input for mechanism operation detection.</td></tr>
<tr><td>31</td><td>MOT CH</td><td>I</td><td>Pin to input for motor activation detection.</td></tr>
<tr><td>32</td><td>L.V. STOP</td><td>I</td><td>Stop mechanism operation and hold key input when low voltage is detected.</td></tr>
<tr><td>33</td><td>HOLD</td><td>I</td><td>"H": HOLD OFF. "L": HOLD ON.</td></tr>
<tr><td>34</td><td>UP</td><td>I</td><td>UP KEY input pin. "H": KEY ON. "L": KEY OFF.</td></tr>
<tr><td>35</td><td>DOWN</td><td>I</td><td>DOWN KEY input pin. "H": KEY ON. "L": KEY OFF.</td></tr>
<tr><td>36</td><td>ENTER</td><td>I</td><td>ENTER KEY input pin. "H": KEY ON. "L": KEY OFF.</td></tr>
<tr><td>37</td><td>C-SW</td><td>I</td><td>Input pin for detecting the presence of cassette. "H": C-SW OFF. "L": C-SW ON.</td></tr>
<tr><td>38</td><td>MOT ON</td><td>O</td><td>Pin to output motor control. "H": MOTOR ON. "L": MOTOR OFF.</td></tr>
<tr><td>39</td><td>MOT HI</td><td>O</td><td>Pin to control motor. "H": MOTOR HI SPEED. "L": MOTOR NORMAL SPEED</td></tr>
<tr><td>40</td><td>MOT DIR</td><td>O</td><td>Pin to output for motor rotation direction. "H": Clockwise. "L": Counter Clockwise.</td></tr>
<tr><td>41</td><td>BRAKE</td><td>O</td><td>Pin to output brake control for motor. "H": BRAKE ON. "L": BRAKE OFF.</td></tr>
<tr><td>42</td><td>REMOTE</td><td>I</td><td>REMOTE CONTROL KEY input pin.</td></tr>
<tr><td>43</td><td>MAIN</td><td>I</td><td>MAIN unit KEY input pin.</td></tr>
<tr><td>44</td><td>FM OUT</td><td>O</td><td>Pin to output for FM mode. "H": FM mode. "L" except FM mode.</td></tr>
<tr><td>45</td><td>AM OUT</td><td>O</td><td>Pin to output for AM mode. "H": AM(MW) mode. "L" except AM(MW) mode.</td></tr>
<tr><td>46</td><td>JACK IN</td><td>I</td><td>This is a pin where HP plug input is detected. "H": no plug. "L" plug exist.</td></tr>
<tr><td>47</td><td>SDATA (REM)</td><td>O</td><td>Pin to output data for remote controller display.</td></tr>
<tr><td>48</td><td>SCLK (REM)</td><td>I</td><td>Pin to input serial clock.</td></tr>
<tr><td>49</td><td>BUZR</td><td>O</td><td>Output buzzer.</td></tr>
<tr><td>50</td><td>FM MODE</td><td>O</td><td>Pin to output FM MONO/ST switching.</td></tr>
<tr><td>51</td><td>F. REC ON</td><td>O</td><td>"H": FWD REC mode. "L": Other mode.</td></tr>
<tr><td>52</td><td>R.REC ON</td><td>O</td><td>"H": REV REC mode. "L": Other mode.</td></tr>
<tr><td>53</td><td>REC ON</td><td>O</td><td>"H": REC mode. "L": Other mode.</td></tr>
<tr><td>54</td><td>F/R CTL</td><td>O</td><td>Output pin for tape run direction. "H": FWD direction. "L": REV direction.</td></tr>
<tr><td>55</td><td>DSL OUT</td><td>O</td><td>Pin to output DSL ON/OFF control.</td></tr>
<tr><td>56</td><td>DOLBY OUT</td><td>O</td><td>DOLBY ON/OFF control output pin.</td></tr>
<tr><td>57</td><td>70/120</td><td>O</td><td>Pin to output normal tape and metal tape switching.</td></tr>
</table>

Pin No.	Pin Name	I/O	Description
58	SDR	O	Pin to control READ,WRITE of EEPROM.
59	SCKL (EEPROM)	O	Pin to output serial clock of EEPROM.
60	SDATA (EEPROM)	I/O	Pin to input/output data of EEPROM.
61	POWER ON	O	"H": POWER ON. "L": POWER OFF.
62	POWER MUTE	O	Pin to output muting. "H": MUTE ON. "L": MUTE OFF.
63	N.C	–	Not connected.
64	IF IN	I	Pin to input IF signal.
65	TU OUT	O	Output "H". "H": TU mode. "L": except TU mode.
66	PLL OUT	O	Output phase comparison instrument.
67	P-SNSR	I	Pin to input photo sensor waveform output.
68	BIAS MUTE	O	Pin to output MUTE when REC. "H": MUTE ON. "L": MUTE OFF.
69	GND	–	GND.
70	FM IN	I	Input FM programmable counter.
71	AM IN	I	Input AM programmable counter.
72	VDD	–	Pin to apply voltage.
73	$\overline{\text{RESET}}$	I	Pin to input system reset signal.
74	XOUT	O	Crystal oscillation pin.
75	XIN	I	Crystal oscillation pin.
76	VXT	–	Power supply pin for crystal oscillation.
77	VLCD	–	Reference voltage pin for LCD drive.
78	C1	–	Reference voltage pin for LCD drive.
79	C2	–	Reference voltage pin for LCD drive.
80	VEE	–	1.5V constant voltage power supply pin for LCD drive.

ADJUSTMENT <TUNER / DECK>

A MAIN C.B



<RADIO SECTION>

1. AM IF Adjustment
   IFT251 ..... 450kHz

2. FM IF Adjustment
   TC201 ..... 10.70MHz

3a. AM VT Check<AU>
   Settings : • Test point : TP3 (VT)
   Method : Set to AM 530kHz (1710kHz) and TP3, check the voltage for 1.3V ± 0.3V (530kHz) less than 7.5V +0.5 /-1.0V (1710kHz).

3b. AM VT Check<AH, AZF>
   Settings : • Test point : TP3 (VT)
   Method : Set to AM 531kHz (1602kHz) and TP3, check the voltage for 1.3V ± 0.3V (531kHz) less than 7.0V +1.0 /-0.5V (1602kHz).

4. FM VT Check
   Settings : • Test point : TP3 (VT)
   Method : Set to FM 87.5MHz and TP3, check the voltage for 3.5V ± 0.8V. Set to FM 108.0MHz <AH, AZF>, 108.1MHz<AU> and check the voltage is 7.5V +1.5 /-1.0V.

5. AM Tracking Adjustment
   L252 ..... 630kHz<AH, AZF>
   ..... 600kHz<AU>
   TC251 ..... 1440kHz<AH, AZF>
   ..... 1400kHz<AU>

6. FM Tracking Adjustment
   TC202 ..... 87.5MHz

7. FM VCO Adjustment
   Settings : • Adjustment location : SFR251
   Method : Connect a frequency counter to pin 11 & 12 of IC251, adjust SFR251 for VCO to 19kHz ± 100Hz.

<TAPE PLAYER SECTION>

8. Tape Speed Adjustment
   Settings : • Test tape : TTA–100
   • Test point : PHONES JACK (J101)
   • Adjustment location : SFR401
   • EGS : OFF<AZF>
   • DSL : OFF
   Method : Play back the test tape, adjust SFR401 for 3015 ± 10Hz (FWD) and ± 45Hz (REV).

9. Dolby Level Check
   Settings : • Test tape : TTA–200
   • Test point : TP1 (Lch), TP2 (Rch)
   • DOLBY NR : OFF
   • DSL : OFF
   Method : Connect an electrolytic capacitor (10uF / 16V) to measured equipment and TP1, check the voltage for 31.6mV ± 1.0dB.

PRACTICAL SERVICE FIGURE

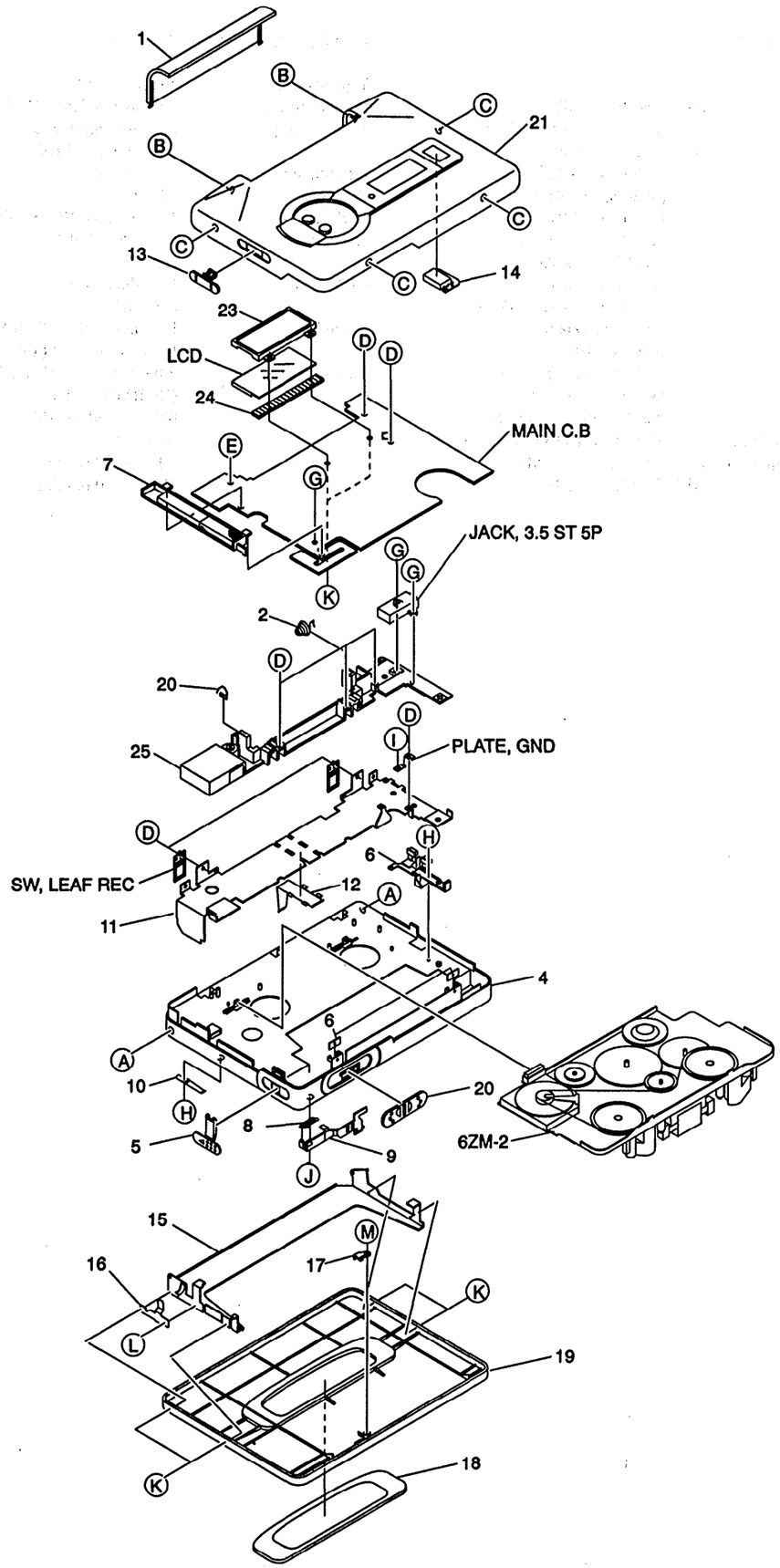
<RADIO SECTION>

Sensitivity :		
(IHF, THD 3%)	FM	Less than 17dB (at 87.5 / 98.5 / 108.0MHz)
(S/N 10dB)	AM	Less than 59dB (at 630kHz)<AH, AZF> (at 600kHz)<AU>
		Less than 57dB (at 999kHz)<AH, AZF> (at 1000kHz)<AU>
		Less than 55dB (at 1440kHz)<AH, AZF> (at 1400kHz)<AU>
Auto stop level		60dB ± 7dB (at 999kHz)<AH, AZF> (at 1000kHz)<AU>
		20dB ± 6dB (at 98.5MHz)
FM stereo separation :	FM	More than 16dB (98.5MHz)
Intermediate frequency :	FM	10.7MHz ± 0.05MHz
	AM	450kHz ± 3kHz

<TAPE PLAYER SECTION>

Tape speed :	3015Hz ± 50Hz
Wow & flutter :	Less than 0.52% (RMS)
Take-up torque :	20 ~ 30g-cm (FWD)
	20 ~ 30g-cm (REV)
F.F torque :	70 ~ 150g-cm
Rew torque :	70 ~ 150g-cm
Back tension :	1 ~ 3g-cm (FWD, REV)
S/N ratio :	More than 43dB (PB, DC)
Distortion :	Less than 3.0% (PB, DC)
Noise level :	Less than 3.0mV (Vol MAX,PB,DC)
	Less than 0.3mV (Vol MIN,PB,DC)
Frequency response :	63Hz+2/-6dB ~ 8kHz±4dB (NORMAL, PB)
	63Hz+2/-6dB ~ 10kHz±4dB (CrO2, PB)
Test tape :	TTA – 320 (NORMAL)
	TTA – 310 (CrO2)

MECHANICAL EXPLODED VIEW 1 / 1

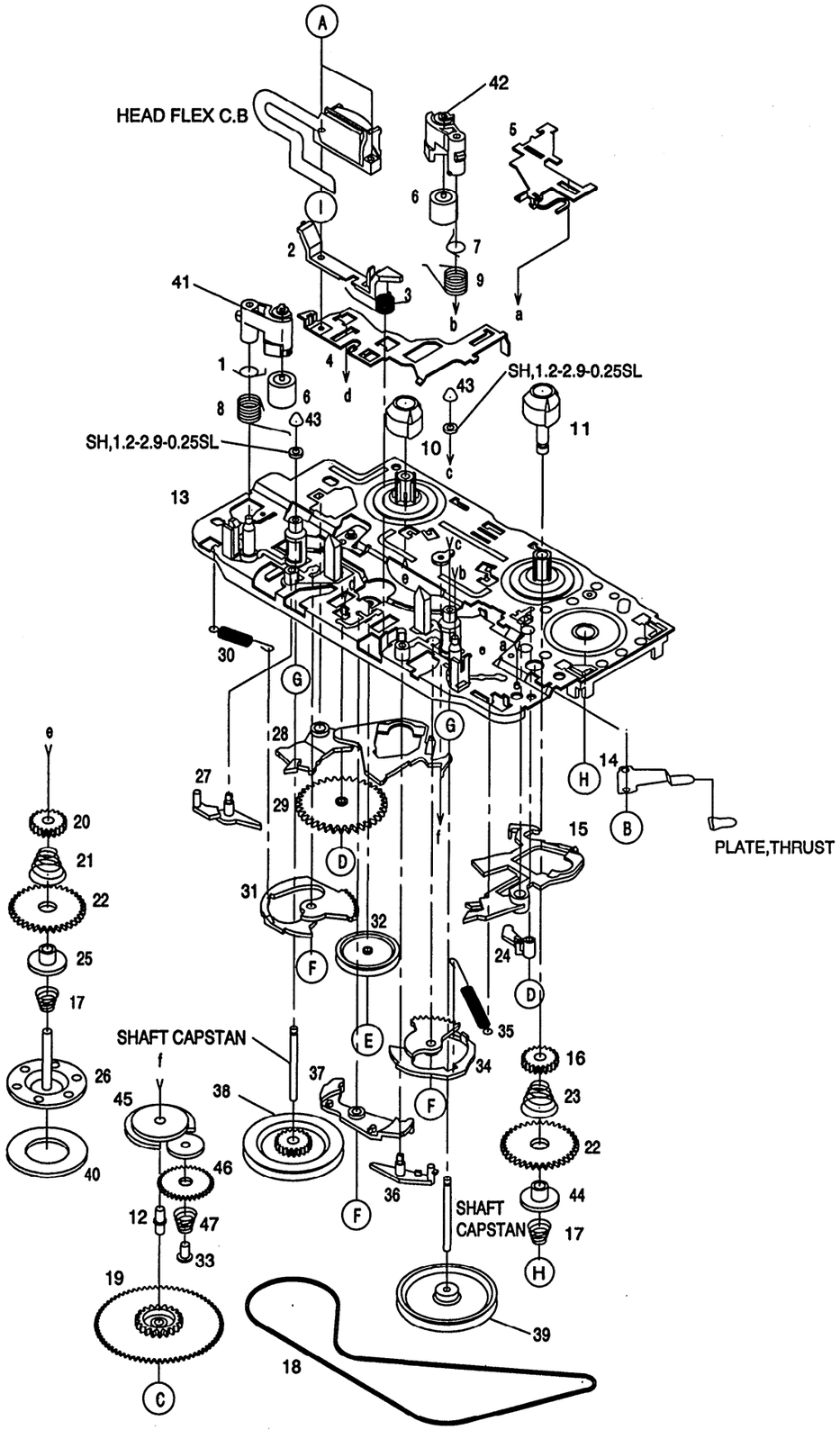


MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-HR6-008-010		LID,BAT
2	88-HR6-205-010		TERMINAL,BAT-
3	88-HR6-012-010		KEY,TUNING R6
4	88-HR6-019-010		FRAME,CENTER R6
5	88-HR6-013-010		KNOB,SL HOLD
6	88-HJ3-208-010		NUT, FRONT
7	88-HJ3-008-010		KNOB,SL OPEN
8	87-HR5-225-010		SPR-E,EJECT N
9	88-HJ3-207-010		PLATE,LOCK
10	87-HR6-219-010		SPR-P,POP UP
11	88-HR6-202-010		PLATE,HINGE
12	88-HJ3-205-010		SPR-P,CASS
13	88-HR6-014-010		KNOB,SL SIDE R6<797AZF>
14	88-HR6-011-010		KEY,BAND
15	88-HJ3-202-010		HLDR,CASS
16	88-HJ3-203-010		SPR-P,CLICK
17	88-HJ3-201-010		STOPPER,CASS
18	88-HJ3-007-010		WINDOW,CASS
19	88-HR6-002-010		LID,CASS 797 EGS<797AZF>
19	88-HR6-001-010		LID,CASS 798<EXCEPT 797AZF>
20	88-HR6-204-010		TERMINAL,BAT+
21	09-028-372-010		CABI REAR ASSY<797AH,797AU>
21	09-028-373-010		CABI REAR ASSY<797AZF>
22	88-HR6-201-010		HLDR,ANTENNA
23	88-HR4-201-010		HLDR,LCD
24	88-HR4-202-010		CONN, RUBBER LCD
25	88-HR6-203-010		HLDR,BAT
A	88-HJ3-220-010		S-SCREW,+1.4-0.7-1 CR NL
B	85-HR4-217-010		S-SCREW,SERR+1.4-4CR
C	87-078-153-010		SCRW,1.4-2.5 CR
D	86-HJ4-222-010		S-SCREW,+1.4-4 B HL
E	87-078-113-010		S-SCRW,+1.4-3.5 HL(B
F	87-067-746-010		SCREW,M 1.4-2(H0.5)
G	87-067-153-010		V+1.4-6.5
H	87-067-384-010		SCREWVT1.4-3.5HL
I	88-HK5-228-010		S-SCREW,+1.4-2 CR
J	87-HK5-235-010		S-SCREW,1.4-0.6-2.5
K	86-HJ3-222-010		S-SCREW,SERR+1.4-2 CR L
L	87-078-216-010		SCRW-SR,1.4-1.4B LS
M	88-HJ3-219-010		S-SCREW,+1.4-2.5 B HL(0.3)

TAPE MECHANISM EXPLODED VIEW 1 / 1

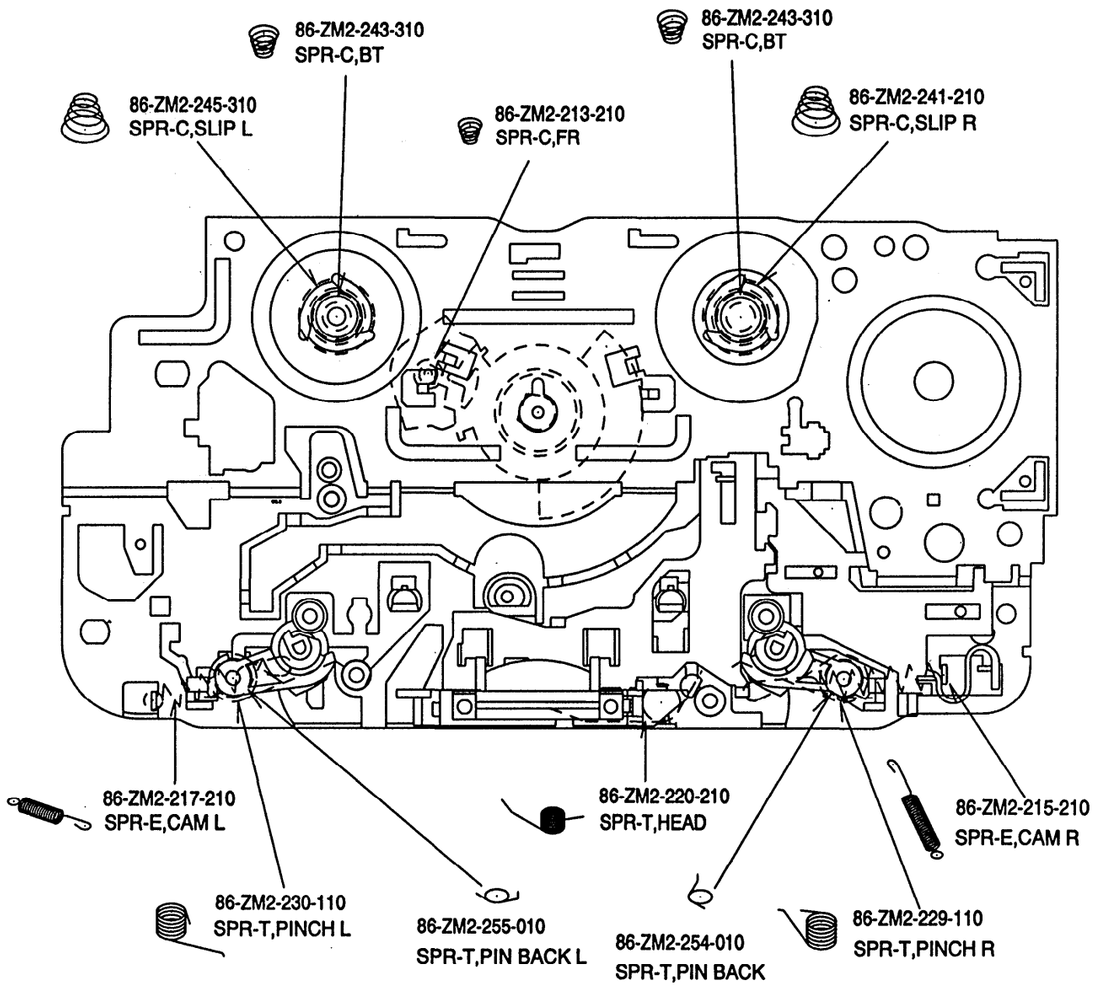


TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-ZM2-255-010		SPR-T,PIN BACK L
2	86-ZM2-252-210		GUIDE,TAPE
3	86-ZM2-220-210		SPR-T,HEAD
4	86-ZM2-219-410		LEVER,HEAD
5	86-ZM2-247-210		LEVER,MS
6	86-ZM2-226-110		ROLLER ASSY,PINCH
7	86-ZM2-254-010		SPR-T,PIN BACK
8	86-ZM2-230-110		SPR-T,PINCH L
9	86-ZM2-229-110		SPR-T,PINCH R
10	86-ZM2-240-110		CAP,REEL
11	86-ZM2-234-110		SHAFT,REEL R
12	86-ZM2-251-210		SHAFT,GEAR B
13	86-ZM2-201-B10		CHAS ASSY,OUT-SERT
14	86-ZS2-312-010		SPR-P,6A-MOT
15	86-ZM2-232-210		LEVER,REEL R
16	86-ZM2-258-610		GEAR,REW
17	86-ZM2-243-310		SPR-C,BT
18	86-ZM2-329-110		BELT,P5
19	86-ZM2-209-110		GEAR,B
20	86-ZM2-238-610		GEAR,FF
21	86-ZM2-245-310		SPR-C,SLIP L
22	86-ZM2-237-010		GEAR,PLAY
23	86-ZM2-241-210		SPR-C,SLIP R
24	86-ZM2-272-010		LEVER,SW P 8.4
25	86-ZM2-236-210		CAP,SLIP
26	86-ZM2-235-210		SHAFT,REEL L
27	86-ZM2-223-210		LEVER,PIN UP L
28	86-ZM2-233-310		LEVER,REEL L
29	86-ZM2-208-210		GEAR,A
30	86-ZM2-217-210		SPR-E,CAM L
31	86-ZM2-216-410		LEVER,CAM L
32	86-ZM2-276-010		PULLEY,COUPLER
33	86-ZM2-212-210		SHAFT,FR
34	86-ZM2-214-410		LEVER,CAM R
35	86-ZM2-215-210		SPR-E,CAM R
36	86-ZM2-222-210		LEVER,PIN UP R
37	86-ZM2-218-110		LEVER,HEAD UP
38	86-ZM2-205-410		FLY-WHL,L
39	86-ZM2-204-110		FLY-WHL,R
40	86-ZM2-282-010		SH,AUTO 2
41	86-ZM2-225-310		ARM,PINCH L
42	86-ZM2-224-210		ARM,PINCH R
43	86-ZM2-283-010		CAP,SHAFT
44	86-ZM2-275-110		CAP,SLIP R
45	86-ZM2-210-610		LEVER,FR
46	86-ZM2-211-210		GEAR,FR
47	86-ZM2-213-210		SPR-C,FR
A	86-ZM2-296-110		S-SCREW,+1.4-8.45
B	87-067-430-010		VT1.4-5 BLK
C	87-067-516-010		PW,3-1.58-0.25,SLIT
D	87-067-860-010		PW,3-0.95-0.4
E	86-ZM2-277-010		W-P,0.8-3-0.2 SLT
F	86-ZM2-319-010		W-L,0.95-3-0.35
G	86-ZM2-313-010		W-P,1.76-4-0.13
H	86-ZM2-278-010		W-P,1.36-4-0.2 SLT
I	86-ZM2-298-010		W-L,1.47-2.4-0.25 W/

SPRING APPLICATION POSITION



ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-HR6-902-010		IB,EF<AZF>
1	88-HR6-904-010		IB,ESC-797<AH>
1	88-HR6-903-010		IB,ESF<AU>
2	87-B30-152-010		HEADPHONE,HP-MR002A(T)
3	86-HJ4-950-010		CASE,CARRYING
4	87-B30-134-010		CHARGER,RB-N01ENC<AZF>
4	87-B30-135-010		CHARGER,RB-N01HNC<AH>
4	87-B30-174-010		CHARGER,RB-N01UNC<AU>

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G－　－	
G－　－	
G－　－	

アイワ株式会社
AIWA CO.,LTD.

9420208, 931261
Tokyo Japan

〒110-8710 東京都台東区池之端1-2-11 ☎03（3827）3111（代表）

Printed in Singapore